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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,392	01/23/2002	Hideyuki Nakamura	Q68202	3938

23373 7590 11/29/2002

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EXAMINER

SCHILLING, RICHARD L

ART UNIT PAPER NUMBER

1752

DATE MAILED: 11/29/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

1052 392

Applicant(s)

Nakamura et al

Examiner

PL Schilling

Group Art Unit

1752

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-28 is/are pending in the application.
Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-28 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☒ The ~~proposed~~ ^{formal} drawing ~~correction~~, filed on 4-23-02 is ☒ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 445
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Wachi et al.

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C.

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102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. Wachi et al. (see particularly column 3 lines 41-60; column 7, lines 38-45; column 12, lines 17-60; column 13, lines 23-51; column 14, lines 15-65; column 18, lines 26-54; Examples 1-5) disclose heat transfer materials and methods for making color proofs wherein the ratio of reflection density to pigmented transfer layer thickness in the working Examples is over 2.5. The image transfer layers and image receiving layers used in the working Examples of Wachi contain the same polyvinyl butyral binders as used in the working Examples in applicants' specification and therefore would inherently have the same contact angles in relation to water as set forth in the instant claims. The pigmented transfer layers in Wachi et al. have pigment concentrations and thicknesses as set forth in applicants' specification. The layers in Wachi et al. also contain surfactants and waxes as used in applicants' working Examples.

2. Claims 1-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S.

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filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. Takahashi et al. (see particularly column 5, lines 28-47; column 8, lines 15-61; column 9, lines 1-16; column 13, lines 40-60; Example 1) discloses image transfer elements and image receiving elements for making color proofs comprising pigmented heat transfer layers with layer thicknesses and pigment concentrations the same as those set forth in applicants' specification. In working Example 1 polyvinyl butyral is used as a binder in the transfer layers and image receiving layers and would inherently have water contact angles as required by the instant claims. The layers in the working Example of Takahashi et al. also include surfactants as used in applicants' working Examples and waxes.

3. Claims 1-28 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takahashi et al. Takahashi et al. discloses transfer elements and image receiving elements for making color proofs wherein the binder materials of the transfer layers and image receiving layers preferably comprise polyvinyl butyral as

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used in the working Examples. The polyvinyl butyral of Takahashi would inherently have the water contact angles as required by the instant claims. Also, since the transfer layer thicknesses and pigment concentrations disclosed in Takahashi et al. are within the scope of those set forth in applicants' specification, the transfer layers in Takahashi et al. would inherently have reflection density to thickness ratios of greater than 1.5 as required by the instant claims. Alternatively, it would at least be obvious to one skilled in the art to use high concentrations of pigments in the transfer layers of Takahashi et al. in order to obtain transfer layers with high densities.

4. Claims 1-14 and 20-28 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamamoto et al. or Tsuno et al. Yamamoto et al. (see particularly column 7, lines 23-34; column 8, lines 6-50; column 11, lines 16-65; column 15, lines 45-56; column 19, lines 29-41; column 21, lines 5-45; Examples 1-6) and Tsuno et al. (see particularly column 6, lines 31-63; column 11, lines 35-58; column 12, lines 55-65; column 13, lines 38-60; column 14, lines 13-26; Examples 1-3) disclose heat transfer elements and image receiving elements for forming color proofs wherein the heat transfer layers and image receiving layers contain polyvinyl butyral binders as preferred binders and as used in the working Examples. Polyvinyl butyral is the binder

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used in applicants' working Examples and would inherently have water contact angles as required by the instant claims. Yamamoto et al. and Tsuno et al. disclose pigmented heat transfer layers containing high amounts of pigments and thicknesses as set forth in applicants' specification so as to inherently have reflection density to thickness ratios greater than 1.5. Alternatively, it would at least be obvious to one skilled in the art to use high amounts of pigments in the transfer layers to provide high image transfer densities. The working Examples in Yamamoto et al. and Tsuno et al. also disclose layers comprising waxes and surfactants as used in applicants' working Examples, i.e. Megafac 177.

5. The prior art submitted by applicants has been considered. Imamura is cited of interest in the art as disclosing heat transfer materials with light to heat conversion layers and transfer layers which may contain polyvinyl butyral binders.

6. Any inquiry concerning this communication should be directed to Mr. Schilling at telephone number (703) 308-4403.

RLSchilling:cdc

November 21, 2002

RICHARD L. SCHILLING
PRIMARY EXAMINER
GROUP 1100 1752

